

# DOE-ID NEPA CX DETERMINATION

## Idaho National Laboratory

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CX Posting No.: DOE-ID-INL-18-014

**SECTION A. Project Title:** Power Management Transmission and Distribution Line Maintenance

**SECTION B. Project Description and Purpose:**

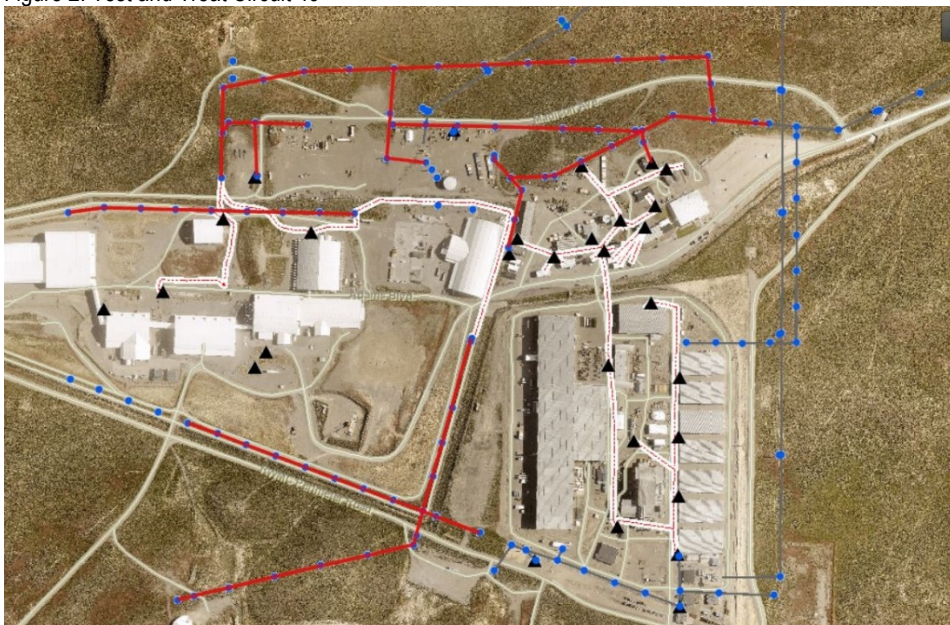
The Power Management organization at Idaho National Laboratory (INL) needs to test and possibly treat power poles and structures, replace poles and structures in poor condition, and inspect and potentially replace other components (e.g., anchors, insulators, cross-arms, wire, etc.) associated with the power distribution system at the INL Site. The following activities will be conducted in 2018:

1. Test and treat - Test and treat removes about 18" of soil at a radius of about 6" around poles or structures to allow the structures to be inspected. After inspection, a physical barrier is wrapped around the pole to prevent degradation, if needed. Soil is then replaced around the pole or structure. The proposed action tests and treats poles at the Power Grid Test Bed (PGTB), poles on circuits 42 (Central Facilities Area [CFA] to Advanced Mixed Waste Treatment Plant [AMWTP]), 52, 53, 54, 55, 56 and 49 (AMWTP) and the Transient Reactor Test (TREAT) Facility overhead line. Figure 1-8 show locations of circuits proposed for test and treat activities.

Figure 1. Test and Treat Circuit 42



Figure 2. Test and Treat Circuit 49



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Figure 3. Test and Treat Circuit 52



Figure 4. Test and Treat Circuit 53

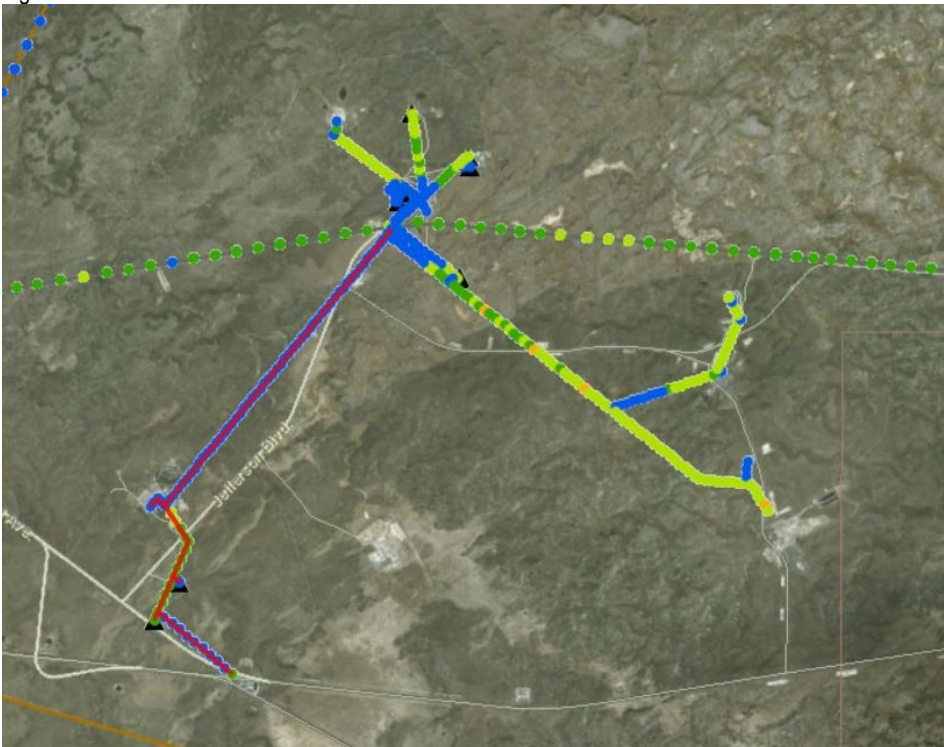




Figure 5. Test and Treat Circuit 54



Figure 6. Test and Treat Circuit 55

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Figure 7. Test and Treat Circuit 56

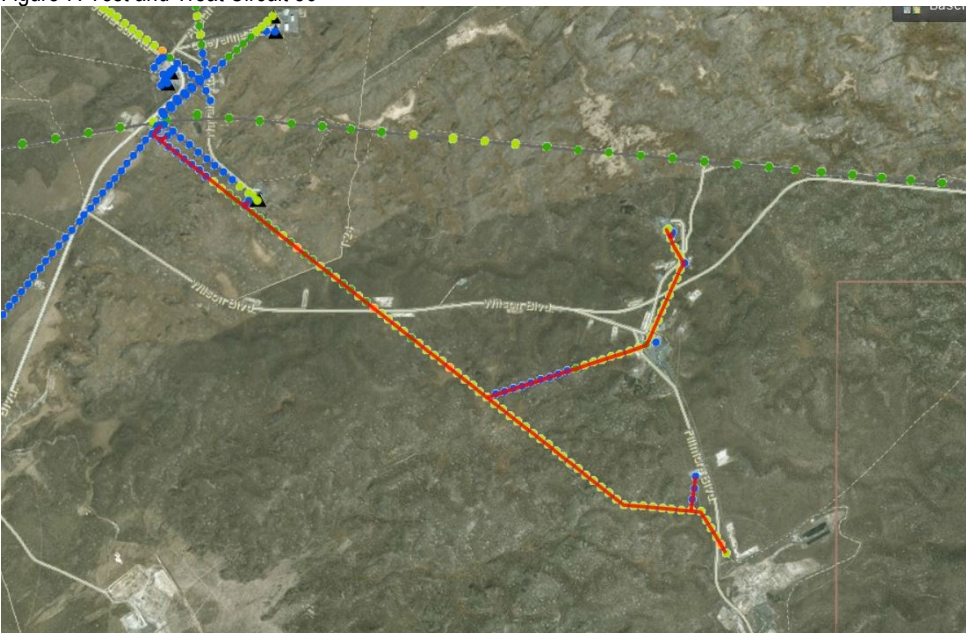


Figure 8. Test and Treat TREAT Overhead Line





2. Pole or anchor removal and replacement, cross arm and insulator repair, hardware replacement- Pole replacement is performed by hydraulic removal of the structure from an approximate depth of 6' - 8'. A new pole is then placed in the old hole, or a new hole is augered in the vicinity (approximately 5') for placement of the new pole. Anchor replacement is accomplished by pulling the anchor or cutting at grade. New anchor(s) are then installed (at ~ 45 degrees) in the vicinity (within approximately 2') by screwing to an approximate 6' - 7' depth, or drilling (if rock is encountered) to a depth of approximately 2'. The proposed action performs this activity on the following structures (East and West Loop shown in Figure 9 and Circuit 44 in Figure 10):
- East Loop: Structures 131, 164, 172, 175, 199, 211, 213, 215, 239, 260, 269, and 276
  - West Loop: Structures 99, 114, 116, 117, 120, 161, and 219
  - Circuit 44: Structures 44-3, 44-79-9, 44-79-12, 44-84, 44-87, 44-90, 44-110, 44-114, 44-120, 44-121, 44-123, and 44-124

Figure 9. Pole Replacement on East and West Loop

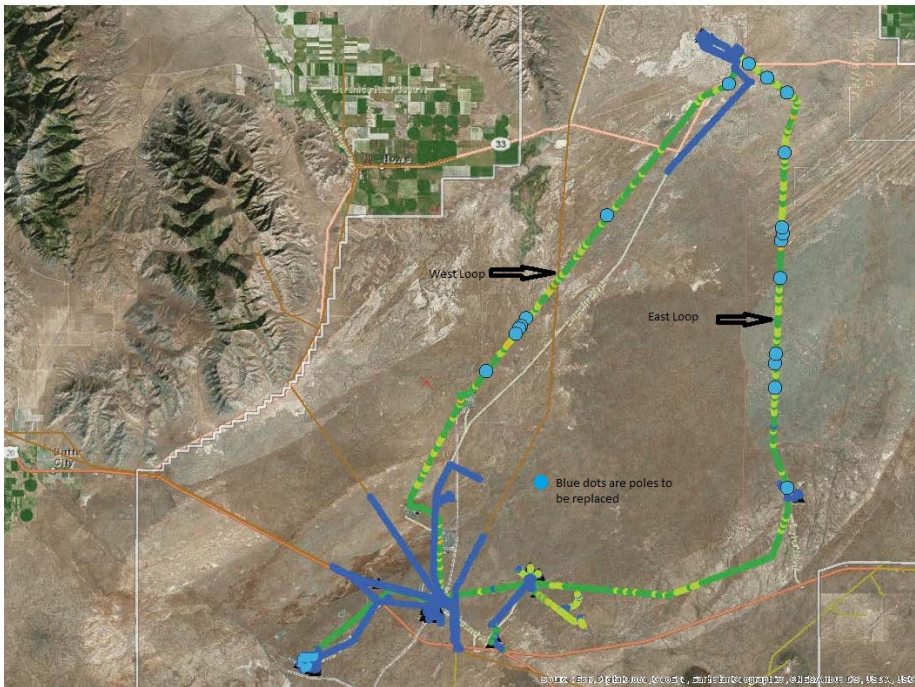
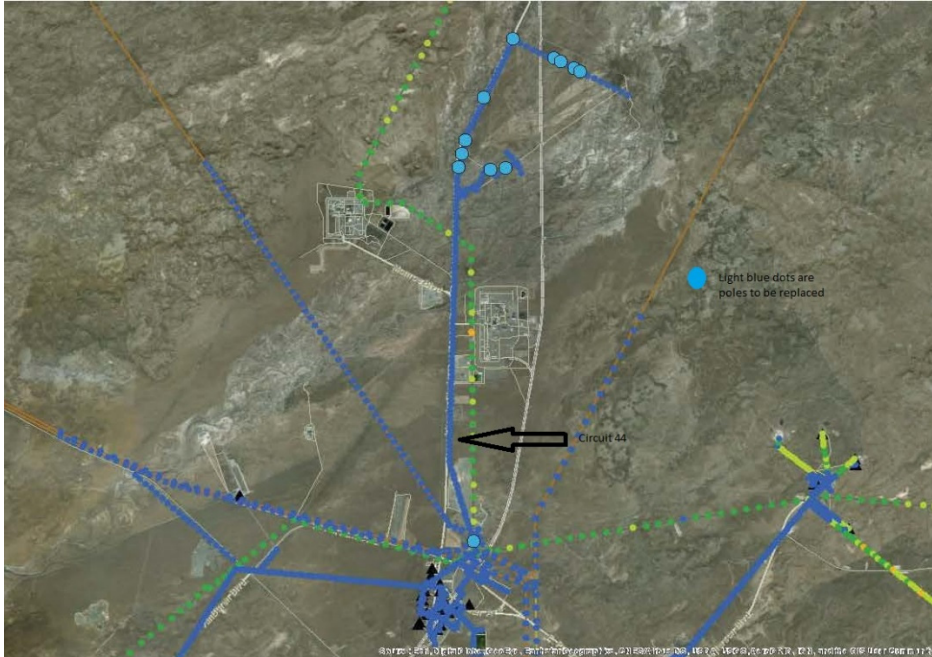


Figure 10. Pole Replacement on Circuit 44



Cross arm and insulator repair and tightening and hardware replacement (Figures 11 and 12) is proposed on the following structures:

- East Loop: Structures 176 through 279
- West Loop: Structures 83 through 230
- Circuit 44: Structures 44-3 through 44-24

Figure 11. 2018 Cross Arm and Insulator Repair and Tightening and Hardware Replacement on East and West Loop (light blue line)



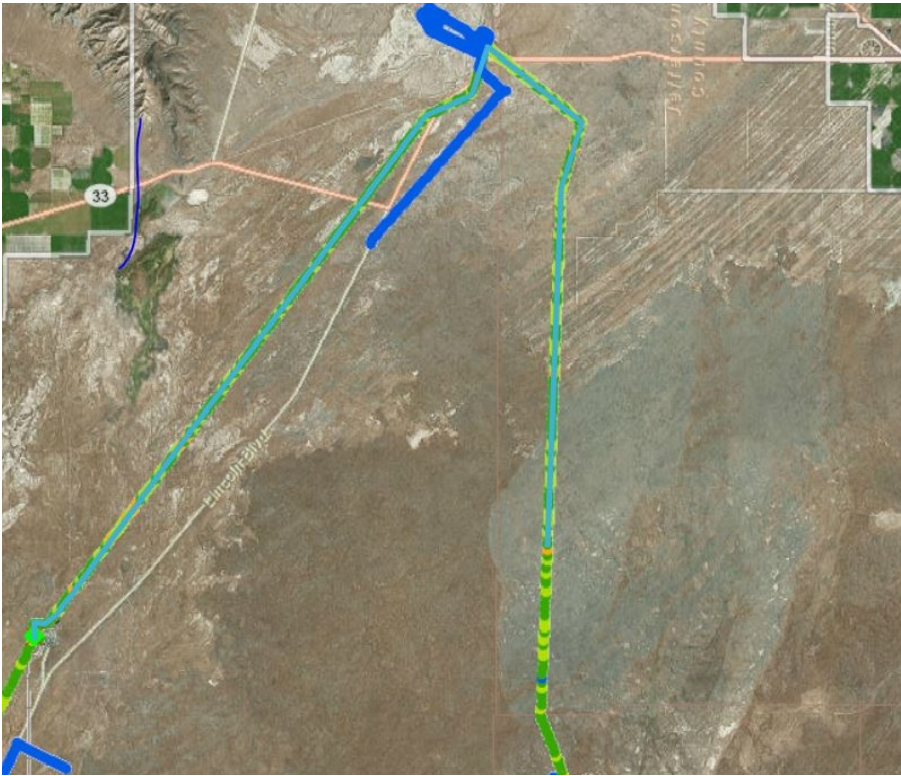


Figure 12. 2018 Cross Arm and Insulator Repair and Tightening and Hardware Replacement on Circuit 44



Finally, the Howe Peak circuit requires the maintenance activities described above. Project personnel must communicate with the DOE project representative to verify authorization from the applicable federal agency (Forest Service or BLM) prior to performing work on structures not within the boundaries of the INL Site. Specific instructions and requirements will be provided prior to starting work.

**SECTION C. Environmental Aspects or Potential Sources of Impact:**

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**SECTION D. Determine Recommended Level of Environmental Review, Identify Reference(s), and State Justification:** Identify the applicable categorical exclusion from 10 Code of Federal Regulation (CFR) 1021, Appendix B, give the appropriate justification, and the approval date.

For Categorical Exclusions (CXs), the proposed action must not: (1) threaten a violation of applicable statutory, regulatory, or permit requirements for environmental, safety, and health, or similar requirements of Department of Energy (DOE) or Executive Orders; (2) require siting and construction or major expansion of waste storage, disposal, recovery, or treatment or facilities; (3) disturb hazardous substances, pollutants, contaminants, or Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)-excluded petroleum and natural gas products that pre-exist in the environment such that there would be uncontrolled or unpermitted releases; (4) have the potential to cause significant impacts on environmentally sensitive resources (see 10 CFR 1021). In addition, no extraordinary circumstances related to the proposal exist that would affect the significance of the action. In addition, the action is not "connected" to other action actions (40 CFR 1508.25(a)(1)) and is not related to other actions with individually insignificant but cumulatively significant impacts (40 CFR 1608.27(b)(7)).

**References:** 10 CFR 1021, Appendix B, B1.3 "Routine maintenance", B4.6 "Additions and modifications to transmission facilities", and B4.10 "Removal of electric transmission facilities".

**Justification:** Activities are consistent with 10 CFR 1021, Appendix B, B1.3 "Routine maintenance activities and custodial services for buildings, structures, rights-of-way, infrastructures (including, but not limited to, pathways, roads, and railroads) vehicles and equipment, localized vegetation...control, during which operations may be suspended and resumed, provided that the activities would be conducted in a manner in accordance with applicable requirements... Routine maintenance activities corrective (that is, repair), preventive, and predictive, are required to maintain and preserve buildings, structures, infrastructures, and equipment in a condition suitable for a facility to be used for its designated purpose. Such maintenance may occur as a result of severe weather (such as hurricanes, floods, and tornados), wildfires, and other such events. Routine maintenance may result in replacement to the extent that replacement is in-kind and is not a substantial upgrade or improvement. In-kind replacement includes installation of new components to replace outmoded components, provided that the replacement does not result in a significant change in the expected useful life, design capacity, or function of the facility. Routine maintenance does not include replacement of a major component that significantly extends the originally intended useful life of a facility (for example, it does not include the replacement of a reactor vessel near the end of its useful life). Routine maintenance activities include, but are not limited to:

- (a) Repair or replacement of facility equipment...
- (e) ...electrical utility...repair or replacement...
- (g) Inspection and/or treatment of currently installed utility poles...
- (m) Repair and maintenance of transmission facilities, such as replacement of conductors of the same nominal voltage, poles, circuit breakers, transformers, capacitors, crossarms, insulators, and downed powerlines, in accordance, where appropriate, with 40 CFR 761 (Polychlorinated Biphenyls Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions) or its successor;
- (n) Routine calibration and testing of facility components, subsystems, or portable equipment (such as...transformers, capacitors...);
- (o) Routine decontamination of the surfaces of equipment...(by such activities as wiping with rags...), and removal of contaminated intact equipment and other material...; and
- (p) Removal of debris."

B4.6 "Additions or modifications to electric power transmission facilities within a previously disturbed or developed facility area. Covered activities include, but are not limited to, switchyard rock grounding upgrades, secondary containment projects, paving projects, seismic upgrading, tower modifications, load shaping projects (such as installation and use of flywheels and battery arrays), changing insulators, and replacement of poles, circuit breakers, conductors, transformers, and crossarms."

B4.10 "Deactivation, dismantling, and removal of electric transmission facilities (including, but not limited to, electric powerlines, substations, and switching stations) and abandonment and restoration of rights-of-way (including, but not limited to, associated access roads)."

Is the project funded by the American Recovery and Reinvestment Act of 2009 (Recovery Act) ☐ Yes ☒ No

Approved by Jason Sturm, DOE-ID NEPA Compliance Officer on: 4/10/2018